

## Computer Operation

CM4-S computers are specially programmed for use with either the restaurant's chicken or french fried items.

The cooking programs are different and the computers must be set for their intended menu.

The computer is set by the factory to the chicken menu. Follow the instructions at right to reset the computer.

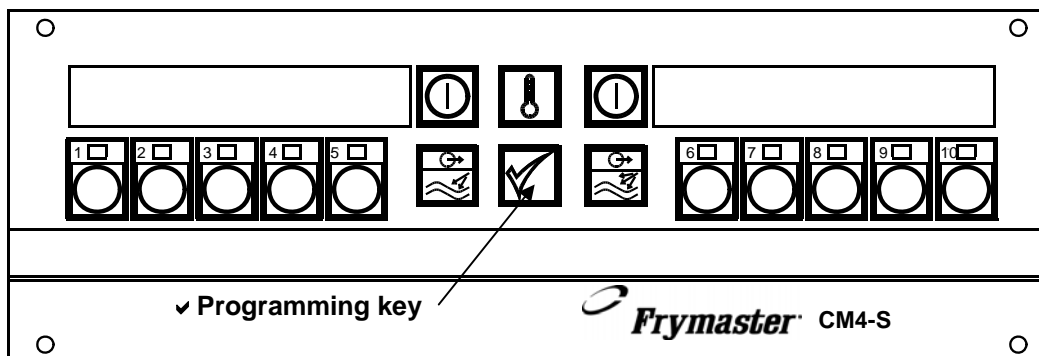


Figure 1: CM4-S Computer with tactile switches.

## Setting up the Fryer for Initial Use

Follow these instructions for the initial filling of a new fryer:

1. Boil out the frypot as described on page 5 to clear any debris associated with manufacturing.
2. Fill the frypot with liquid shortening to the lower of the two etched marks in the frypot. If using solid shortening, cut the shortening into small squares and pack tightly into the frypot. Lift the elements on an electric fryer to pack the lower frypot. Press the elements into the shortening until they assume their normal position (a safety switch prevents element operation if the elements are not in the "down" position). Continue to pack shortening around the elements until reaching the lower etched line in the frypot. Pack the shortening tightly around and under the tubes of a gas fryer.

**⚠ WARNING**

Never set a complete block of shortening on top of heating elements or heating tubes. To do so will damage the fryer and void the warranty.

## Setting the Computer for French Fry or Chicken Operation

To set the computer for Chicken, follow these steps:

1. With the display showing OFF, press the ✓ programming key. See Figure 1 above.
2. With the numbered keys, enter 1113. CHICKEN FRYER will be displayed for about 10 seconds and the fryer will return to OFF.
3. Press the ON button. The fryer will begin to heat to setpoint.
4. Press the #1 key and the LEDs in all programmed product keys will light.
5. When the fryer reaches setpoint the computer will display dashed lines. Press a product button to launch a cook cycle.
6. Flip the menu strip on the computer to the appropriate menu. (See fryer manual.)

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**To set the computer for french fries follow these steps:**

1. With the display showing OFF. Press the ✓ programming key. See Figure1.
2. With the numbered keys, enter 1114. *FRENCH FRYER* will be displayed for about 10 seconds and the fryer will return to OFF
3. Press the ON button. The fryer will begin to heat to setpoint.
4. Press a product key and the LEDs in all programmed product keys will light.
5. When the fryer reaches setpoint, the computer will display dashed lines. Press a product button to launch a cook cycle.
6. Flip the menu strip on the computer to the appropriate menu. (See fryer manual.)


**Operating the Fryer after Setting for Cooking Operation**

Here are the default menus for the chicken and French fry settings:

<b>Chicken Menu</b>			
<b>Key</b>	<b>Product</b>	<b>Time</b>	<b>Temp</b>
1	Chicken	12:00	340°
2	Chicken	12:00	340°
3	Chicken	12:00	340°
4	Strips	3:00	340°
5	Filets	5:00	340°
6	Pies	7:00	340°

<b>French Fry Menu</b>			
<b>Key</b>	<b>Product</b>	<b>Time</b>	<b>Temp</b>
1	French Fries	3:00	340°
2	French Fries	3:15	340°
3	Popcorn Shrimp	3:00	340°
4	Catfish	4:30	340°
5	Nuggets	4:00	340°
6	Onion Rings	3:00	340°
7	Butter Fly Shrimp	3:00	340°
8	Crawfish	2:00	340°

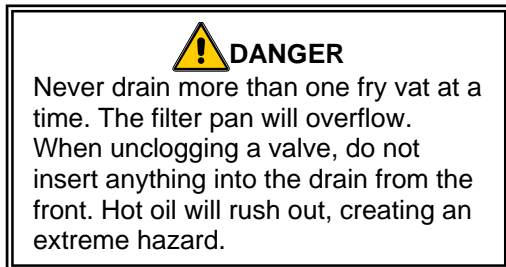
### Daily operation with the fryer set to either Chicken or French Fry Mode

1. Turn the fryer on by pressing the  button on the computer.
2. The display will show *L O W* as the fryer enters a melt cycle, slowly heating the shortening.
3. When the fryer reaches setpoint, dashed lines appear on the computer display.
4. Press a product key for the desired product.
5. The cook cycle begins. Self-canceling alarms sound, indicating the product should be shaken, at preset points in the cook cycle.
6. *D O N E* is displayed on the computer at the end of the cook cycle.
7. Press the product button to end display.

### Filtration

The filter pan must be clean before beginning filtration. Follow these steps to prepare the filter pan for filtration:


1. Open fryer cabinet doors and remove the pan from the fryer cabinet.
2. Remove crumb tray, hold-down ring, filter paper and inner screen.
3. Clean inner screen and pan interior.
4. Clean the crumb tray and place debris in a fireproof container.
5. Return components to the filter pan in this order: inner screen, filter paper, hold-down ring and crumb tray.
6. Add filter powder.
7. Replace filter pan lids and return filter pan to fryer cabinet.
8. Ensure the connection to the fryer's oil-return line is properly connected.
9. Close fryer cabinet doors.



### Computer Prompts for Filtration


The computer display will flash *F I L T E R* at the completion of a cook cycle, indicating the fryer has completed a preset number of cook cycles and must be filtered. Follow these steps to filter the fryer. The fryer must be at operating temperature to filter.

1. Computer flashes *F I L T E R*.
2. Leave the computer ON.
3. Ensure the filter pan is prepared for filtering (see above). Ensure the connections are properly connected.
4. Use the fine-mesh skimmer to remove large particles and debris from shortening prior to draining frypot.
5. Open the drain valve with the red-handled lever in the fryer cabinet. As the shortening drains, use a metal scraper to gently remove debris from walls above shortening level in frypot.
6. *O P E N D R A I N* is displayed on the computer. Shortening flows from the frypot to the filter pan.

7. While the frypot is draining, connect the rinse hose to the connection inside the filter cabinet. After all shortening has drained, remove the frypot wire rack. Use a dry scrub pad to clean the walls of the vat.
8. Position the hose nozzle inside the frypot. Press the wand/disposal rocker switch on the fryer topcap to ON and activate the blue Wand/Dispose handle to the open position to start the 3-minute rinse process. Do not remove the hose nozzle from frypot during the rinse process.
9. Hold the hose nozzle at a 45-degree angle toward the back of the frypot. This washes debris toward the drain valve and helps prevent the drain valve from becoming clogged. Rinse the frypot for approximately 2-½ minutes (allow 30 seconds to disconnect and drain the hose wand). Press the wand/disposal rocker switch to OFF and switch the Wand/Dispose handle to the closed position; disconnect and drain the rinse hose into the filter pan.
10. At 3 minutes after opening the drain valve, the computer display will alternate between *O P E N D R A I N* and a countdown of the filtering time. Replace the frypot wire rack before continuing.
11. Turn the filter pump on with the yellow-handled lever that coincides with the frypot being filtered. Leave the drain valve open. Allow the shortening to circulate through the frypot for the remainder of the 10-minute cycle. This process is known as "polishing".
12. At the completion of the filter cycle, the computer display will change to *F I L L*.
13. Close the drain valve with the red-handled drain valve lever. The frypot will fill.
14. As the filter pan is emptied, bubbles will form in the frypot. An audible alarm sounds when the frypot is full.
15. Turn off the filter pump with the yellow-handled filter pump handle. Add new shortening to bring level to the upper OIL LEVEL line. Remember, the shortening is at operating temperature.
16. Press the  button. The fryer will return to operating temperature. Continue to filter other frypots as needed.





### **Delaying Filtration**

The filtration can be delayed, if necessary, by following these steps.

1. At the completion of a cook cycle, the computer display flashes *F I L T E R*.
2. Press the  button to turn computer OFF.
3. Press the ✓ programming button. See Figure 1.
4. *C O D E* is displayed on the left side of the computer.
5. Enter 1111 with the numbered keys. The display changes to a steady display of *F I L T E R*.
6. Cook cycles can be launched, however, *F I L T E R* will be displayed until a filter operation is completed.

## Boil Out

Boil out is necessary before using a fryer for the first time and at prescribed times as part of preventive maintenance. Follow these steps to boil out a frypot:

1. Ensure the shortening is at operating temperature.
2. Press the  button to turn computer OFF.
3. Open the drain with the red-handled drain-valve lever. The shortening will flow into the filter pan.
4. Close the drain valve when all shortening is drained.
5. If a shortening disposal system is present, **ensure it is connected to the fryer and working properly.** Use the cabinet-mounted rocker switch and the blue handle in the filter cabinet to DISPOSE of spent shortening in the filter pan. Ensure all shortening is pumped from filter pan and lines before turning off the pump. Remove and thoroughly clean filter pan and components. Do not replace filter pan until boil-out procedure is completed.
6. Fill the frypot to the top OIL LEVEL line with clean water.
7. Pour in boil-out cleaning detergent.
8. Press the programming key on the computer (See Figure 1).
9. `CODE` appears on the left display of the computer.
10. Enter 1115.
11. `BOIL OUT` appears in the left display. `PRESS CHECK TO START` appears in the right display.
12. Press the  button.
13. `BOIL OUT` appears in the left display; a time display, which starts at 30:00, appears in the right and counts down the boil out.
14. The water/detergent solution heats to 195°F.
15. The computer displays `DONE` and beeps at the end of the boil out.
16. Press the  button to turn computer OFF.
17. Drain the boil-out solution into a metal stockpot capable of holding the complete contents of the frypot and discard.
18. Rinse frypot with clean water, drain into stockpot and dry the frypot.
19. Fill with fresh shortening to the lower OIL LEVEL line on the back of the frypot.
20. Replace the filter pan.
21. Press the  button to turn the computer ON. The oil will heat.

 **DANGER**

Never leave the fryer unattended during boil out. If the boil-out solution boils over, turn the computer off immediately and let the solution cool before resuming the process.

 **WARNING**





Do not drain boil-out solution into the built-in filtration system. It can damage the filter pump.

 **DANGER**

Remove all drops of water from the frypot before filling with oil. Failure to do so may cause spattering of hot liquid when the oil is heated to cooking temperature.

## CM4-S COMPUTER OPERATION (PROGRAMMED FOR POPEYE'S)

### Follow these instructions if there is no oil disposal system:

1. Press the  button to turn computer OFF and allow the oil to cool to approximately 100°F (38°C).
2. Remove and clean the filter pan.
3. Position a shortening disposal unit or a metal container suitable to handle hot liquid under the drain valve.
4. Open the drain with the red-handled drain-valve lever. The shortening will flow out. Do not overfill the container. Repeat draining process as necessary.
5. Close the drain valve when all shortening is drained.
6. Fill the frypot to the top OIL LEVEL line with clean water.
7. Pour in boil-out cleaning detergent.
8. Press the programming key on the computer (See Figure 1).
9. *COOE* appears on the left display of the computer.
10. Enter 1115.
11. *BOIL OUT* appears in the left display. *PRESS CHECK TO START* appears in the right display.
12. Press the  button.
13. *BOIL OUT* appears in the left display; a time display, which starts at 30:00, appears in the right and counts down the boil out.
14. The water/detergent solution heats to 195°F.
15. The computer displays *DONE* and beeps at the end of the boil out.
16. Press the  button to turn computer OFF.
17. Drain the boil-out solution into a metal stockpot capable of holding the complete contents of the frypot and discard.
18. Rinse frypot with clean water, drain into stockpot and dry the frypot.
19. Fill with fresh shortening to the lower OIL LEVEL line on the back of the frypot.
20. Replace the filter pan.
21. Press the  button to turn the computer ON. The oil will heat.

 **DANGER**

Remove all drops of water from the frypot before filling with oil. Failure to do so may cause spattering of hot liquid when the oil is heated to cooking temperature.